



# Inedge Power

Powering the Future with Sustainability

2025



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On Company Overview

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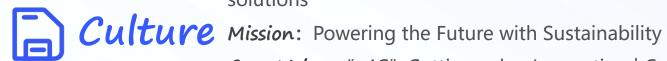


# Company **Profile**





2024 Established



*Vision*: To be the world's leading provider of smart energy solutions

Core Value: " 4C" Cutting-edge Innovation | Customer

Obsession | Cornerstone Safety | Collaborative Green Future



Shenzhen, Hainan, Jiangsu, Europe



## **Competitive Advantage**

## Cross-disciplinary Team

Expertise in Power, Al and loT

# 2 Deep Understanding of Electricity Trading

- In-depth Market Knowledge
- · Enhanced Value
- Smart Decision-making

# **3** Profit-Driven Al Energy Management

- Al-Powered Profitability
- Intelligent Energy Management
- Multi-market portfolio strategy benefits
- Self Adaptive global markets

## 4 Agile Service Network

- Global Reach
- Europe Local Support
- End-to-End Services
- Full Life cycle Support
- Customized Approach





## The Whole Chain Value Creation

#### **Hardware**

- Modularized BESS cabinets and container
- Flexibly match versatile application and demand

#### **Software**

- Smart BMS/PCS/EMS/OSS--precisely control charging and discharging and enhance system efficiency and safety
- Integrates VPP interfaces and AI engines for power trading operations.

#### Service

- Technical Consultant
   Full lifecycle IRR simulation, providing clients with precise decision-making support.
- Localized Service Team -Full lifecycle safety insurance
- Electricity trading operations





## **Team Strengths**



# 10+ Years of Expertise

•The team have over 10 years experience in energy storage, with deep understanding of global market standards and industry best practices.

# Al-Powered Innovation

•Al algorithm experts integrate Al with energy storage, driving industry development and innovation.

# Rich Practical Experience

- •Developed a wide range of products, including air-cooled and liquid-cooled systems for large-scale and commercial storage.
- Successfully delivered projects at the GWh level, with strong risk mitigation capabilities.

## End-to-End Solutions

- •Comprehensive team covering product design, planning, system integration, electrical engineering, testing, project delivery, pre-sales, and after-sales support.
- •Offers rapid, integrated solutions to meet diverse customer needs.

#### Advanced Management Philosophy

 Practice IPD (Integrated Product Development) and LTC (Lead-to-Customer) methodologies, prioritizing quality and customer satisfaction to ensure project success.



Technology advantages

Al + Energy Storage: Redefining Energy

Efficiency

### Multi-layer Safety Design

- ·Comprehensive safety design covering cells, packs, and the whole system.
- •Robust electrical and fire protection.
- ·Multi-level fault self-healing system.
- •Thermal runaway probability reduced to 0.001%.
- ·Integration of software and hardware to create an extremely safe energy storage system.

### Energy Management System

- ·Features Virtual Power Plant (VPP), overseas O&M platform, and integrated energy management platform.
- ·Provides efficient energy and O&M management services to enhance the value of

## Visualized Lifecycle Management

- ·Based on data analysis of energy storage operations, assess system stability margins and continuously optimize design.
- ·Provides operational optimization recommendations for project owners and O&M teams.
- ·Offers full lifecycle quality tracking and analysis, with early warning capabilities for product lifecycle.

### Standardized Design + Flexible Application

- ·Standardized energy storage system design for easy validation and enhanced system stability.
- ·Rapid response to customized customer needs, with customized design completion within 30 days.

## Al-Driven Optimization

- Dynamic electricity price prediction accuracy > 90%.
- Adaptive charging and discharging strategy learning, increasing revenue by 15% comparing to traditional solutions.

### Customized Solutions

·Offers customized solutions for various applications, including: Standalone Energy Storage | Shared Energy Storage Commercial & Industrial Energy Storage | Solar + Storage + Charging | Microgrids | Backup Power | Power Quality Improvement | Distribution Network Energy Storage Oilfield Microgrid

energy storage



## **Test Platform**

#### **Joint Laboratory**

with Guangdong Weineng Testing Technology Co., Ltd

# **Comprehensive Testing & Validation for Energy Storage Systems**

Electrical Performance Testing

**Environmental Testing** 

Mechanical Testing

Reliability Testing

Electrical Safety Testing

Safety and Fire Protection Testing

**Empowering Energy Storage with Advanced Testing Solutions** 



# NEDGE POWER: enario-based Solutions - Deeply Matching Needs, Unleashing Energy Value

## Photovoltaic + Energy Storage + Charging (PV-



- ·Pain Points: Low charging pile utilization, high electricity costs
- ·Solution: Integrated PV, energy storage, and charging pile management
- •Customer Value: Reduces charging costs by 25%, investment payback period <
- 4 years

#### Industrial Parks



- •Pain Points: Excessive demand charges, unstable power supply
- •Solution: Energy storage + demand management + VPP frequency regulation
- •Customer Value: Saves over 18% on annual electricity bills, earns frequency
- regulation subsidies

### Commercial Buildings



- ·Pain Points: High backup power costs, carbon emission pressure
- •Solution: Energy storage + diesel generator replacement + carbon asset development
- •Customer Value: Reduces backup power costs by 40%, increases carbon trading revenue

# NEDGE POWER: enario-based Solutions - Deeply Matching Needs, Unleashing Energy Value

### Microgrids



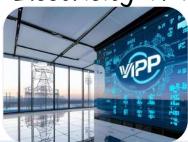
- ·Pain Points: Insufficient reliability of off-grid power supply
- •Solution: Multi-energy complementary + AI microgrid dispatch
- •Customer Value: Energy self-sufficiency rate > 85%, zero power outage perception

#### Public Facilities



- •Pain Points: Difficulty in meeting low-carbon policy standards
- •Solution: Energy storage + green electricity aggregation + government subsidy application services
- •Customer Value: Meets local energy storage requirements, reduces compliance costs

## Electricity Trading



- •Pain Points: Difficulty in capturing benefits from electricity price fluctuations
- •Solution: VPP aggregation + cross-regional trading + AI strategy
- •Customer Value: Increases asset return rate by over 30%



02
Product
Category



## **Utility BESS Serials**

Utility Scale Inedge Vault C5016 5.016MWh



VPP
Participating in Peak
Shaving and Frequency
Regulation as a
Secondary BRP and BSP



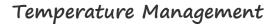


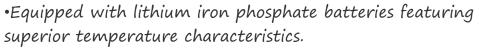
OSS (Operations and Maintenance System)
Provides calculation, certification, installation, maintenance, and data management services for energy storage and charging equipment exported to Europe



## Safety design







•Structure design for enhanced heat dissipation, fire resistance, and gap discharge, supported by simulation and verification for safety assurance.

#### Electrical Safety Design

•Comprehensive electrical design protection mechanisms.

•Separation of electrical components and battery storage, with zoned management to reduce electrical safety risks.

#### Fire Prevention and Control Systems

•Integrated temperature and smoke detection, clean gas, and automatic water fire alarm and extinguishing systems.

•Multi-layer safety assurance with 1 inspection, 2 ventilation, and 3 heat release measures to prevent thermal runaway.

#### Advanced Safety Measures

•Separation of electrical and battery storage areas, with zoned management to minimize electrical safety hazards.
•Advanced fire safety systems including temperature and smoke detection, clean gas, and automatic water fire alarm and extinguishing systems.





## Inedge Vault C5016



- •Intelligent liquid cooling temperature control design for efficient heat dissipation and rapid response;
- •High-precision battery capacity detection, State of Charge (SOC) estimation, and State of Health (SOH) assessment;
- •Full lifecycle quality tracking and analysis to establish early warning capabilities for product lifecycle

ltem	Parameter		
Battery Type	LFP 3.2V/314Ah		
System Capacity	5.016MWh (20 ft)		
Rated C-rate	0.5CP		
DC Voltage range	1123~1500Vdc		
Fire Suppression	Gas fire suppression + Smart alarm+ Combustible gas detection +Ventilation+ Explosion relief + pack level fire optional + Dry water pipe reserved		
DC Efficiency	≥94%@0.5CP		
Cooling Method	Intelligent liquid cooled		
Temperature Difference	≤3°C		
Compliance	GB/T-36276、IEC62619、UL9540、UL9540A、 UL1973、UN38.3		
Size (L*W*H)	6058*2438*2896		
Weight	42T		



## **C&I BESS Serials**



### Integrated EMS

Provides one-stop sourcenetwork-load-storage management and VPP integration services for C&I sectors.



105kW/261kWh

OSS (Operations and Maintenance System)

Warehouse and massive mature user cases in Europe, provide data management and quick installation and maintenance services



Inedge Pod P215 100kWh/215kWh



Inedge Pod P100 50kWh/100kWh

PV&Strorage Inverter inbult

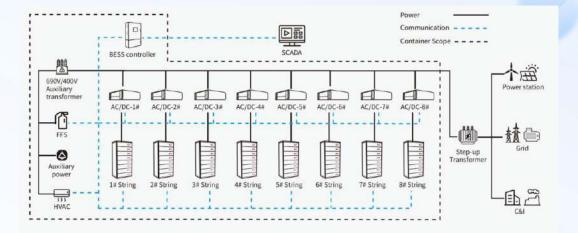
Designing for solar panel system, one-stop solution, easy installation. Quickly realize surplus solar energy storage and using



## **Inedge Pod C2612**



- String design, with individual cluster management to eliminate the "short bucket" effect;
- BMS (Battery Management System) active balancing technology to better maintain battery consistency;
- Sperate management of each cluster. Failure of a single cluster does not affect the overall system operation.



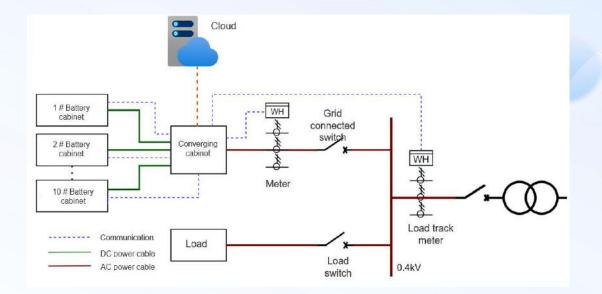
Item	Parameter		
Rated Voltage	400V,3W+N + PE		
Rated Power	1050kW		
Battery Module	LFP\314Ah\1P52S*5, Intelligent liquid cooled		
Rated Capacity	2612.48kWh		
Rated DC Voltage	832V		
DC Voltage Range	715~936V		
C-rate	0.5CP		
RTE	≥88%@0.5CP		
Temperature Difference	≤3°C		
Fire Suppression	Aerosol (cabinet level)		
IP	Cabinet:IP55, PACK:1P67		
Size (W*D*H)	6058*2438*2896mm		
Weight	≈27T		
Code Compliance	GB 36276, IEC 62619, UN38.3, EN IEC 62477-1 EN IEC 61000-6-2/4		



## **Inedge Pod B261**



- •Under standard operating conditions, the system lifecycle exceeds 6,000 cycles; (Normal, 25°C)
- •High corrosion resistance rating are optional, suitable for various scenarios (C3/C4/C5);
- •BMS active balancing technology ensures better battery consistency



Item	Parameter	
Rated Voltage	400V,3W+N + PE	
Rated Power	105kW	
Battery Module	LFP\314Ah\1P52S*5, Intelligent liquid cooled	
Rated Capacity	261kWh,supporting max.10 cabinets paralleled	
Rated DC Voltage	832V	
DC Voltage Range	715~936V	
C-rate	0.5CP	
RTE	≥88%@0.5CP	
Temperature Difference	≤3°C	
Fire Suppression	Aerosol (cabinet level)	
IP	Cabinet:IP55,PACK:1P67	
Size (W*D*H)	1450*1300*2150mm	
Weight	≈2.6T	
Code Compliance	IEC 62619, UN38.3, EN IEC 62477-1,EN IEC 61000-6- 2/4	



## **Inedge Pod P215**



#### Safety and Reliability

- -Dual fire protection system design for multi protection.
- -1+1 Redundant design.

#### Simple and Friendly

Esay installation, pre-installed before delivery.

Backup time with 2-5 hours

Cost-Effective & High Efficiency
-100% DOD, improve return on investment.

Item	Parameter
Rated capacity	215kWh
Normal voltage	AC400V
Cooling method	Intellegant air cooling
Auxiliary electrical parameters	50Hz/60Hz
Fire protection system	S type aerosol
Anti-corrosion level	C3
C-rate	0.5CP
IP Rating	IP54
Operating temperature range	'-20°C~50°C
Storage temperature	' -20°C~50°C
Operating humidity range	0~95% RH
Operation condition	Max. 2 charges & 2 discharges per day
System communication interface	Ethernet/RS485/CAN
External communication protocol	Modbus TCP/IEC61850/Modbus RTU
Alttitude	Within 3000m
Dimension (W*D*H)	1740*1100*2330mm
Weight	≈2.4T
Code Compliance	IEC 62619, UN38.3, EN IEC 62477-1,EN IEC 61000-6-2/4



# **Inedge Pod P100**



#### •PV&Strorage Inverter inbult

- •-Designing for solar panel system.
- •-one-stop solution, easy installation.
- •-Quickly realize surplus solar energy storage and using

Battery Parameters				
Item		Parameter		
Rated capacity	102.4kWh			
Normal voltage	512V			
Operating voltage range	456-576	V		
Cooling method	Air cooli	ng		
C-rate	Max 0.5	CP		
IP Rating	IP54			
Operating temperature range	'-20°C	~50°C		
Dimension (W*D*H)	1533mn	n*1000mm*2150mm		
Weight	1430KG	i -		
Code Compliance	IEC 626	19, UN38.3, EN IEC 62477-1,EN IEC 61000-6-2/4		
	Inve	erter Parameters		
DV-PV				
Max. PV Voltage		1000V		
MPPT Range/Normal		180V-900V		
Max.Input Current/String		36A		
Qty of MPPT		4		
Max. Input Power/String		75kW		
AC-On-Grid				
Rate AC Output Power		50kW		
Max. AC Output Power		55kW		
Max, AC current		75A		
Rated AC Voltage		400V/3L/N/PE		
Rated Grid Frequency/Range	9	50/60Hz±5Hz		
AC Current Harmonics		<3% (100% LOAD)		
AC-Off-Grid				
Rated AC Voltage		400V 3L/N/PE		
Rated Grid Frequency/Range		50/60Hz		
Rated AC Output Power		50kW		
Max AC charge/discharge Current		75A		
Switch Time		≤10s		



## **Residential BESS Serials**















## **Wheel-Mounted Model Serials**



		EPES-W2		
Rated Voltage	51.2V			
Rated Capacity	280Ah	300Ah	314Ah	345Ah
Rated Energy	14.34kWh	15.36kWh	16.08kWh	17.66kWh
Output Voltage Range	43.2-58.4V			
Charge Voltage	57.6-58.4V			
Cut-off Voltage	43.2V			
Max. Charge Current	150A			
Dimension L*H*Y(mm)	825*415*235			
Weight(kg)	110	112	118	127
Humidity	5%~95% Relative humidity			
Charge Temperature	0°C~50°C			
Discharge Temperature	'-20°C~60°C			
Weight	'-10°C~30°C			
Cycle Life	>6000 times(0.2C, @25°C, 80%DOD)			
Design Life	>10years			
Operating mode	Touch Screen			



## **Wall-Mounted Model Serials**



	EP	ES-WM4			
Rated Voltage		25.6V		51.2V	
Rated Capacity	100Ah	100Ah 200Ah		200Ah	
Rated Energy	2.56kWh	5.12kWh	5.12kWh	10.24kWh	
Output Voltage Range	21	.6-29.2V	43.	43.2-58.4V	
Charge Voltage	28	.8-29.2V	57.6-58.4V		
Cut-off Voltage		21.6V	43.2V		
Max. Charge Current		100A		100A	
Dimension L*H*Y(mm)	434*384*142	650*384*142	650*384*142	680*412*231	
Weight(kg)	25	48	48	86	
Humidity		5%~95% Relative humidity			
Charge Temperature		0°C~50°C			
Discharge Temperature		'-20°C~60°C			
Weight		'-10°C~30°C			
Cycle Life		>6000 times(0.2C, @25°C, 80%DOD)			
Design Life		>10years			
Operating mode		Touch Screen			



## **Stackable Model Serials**



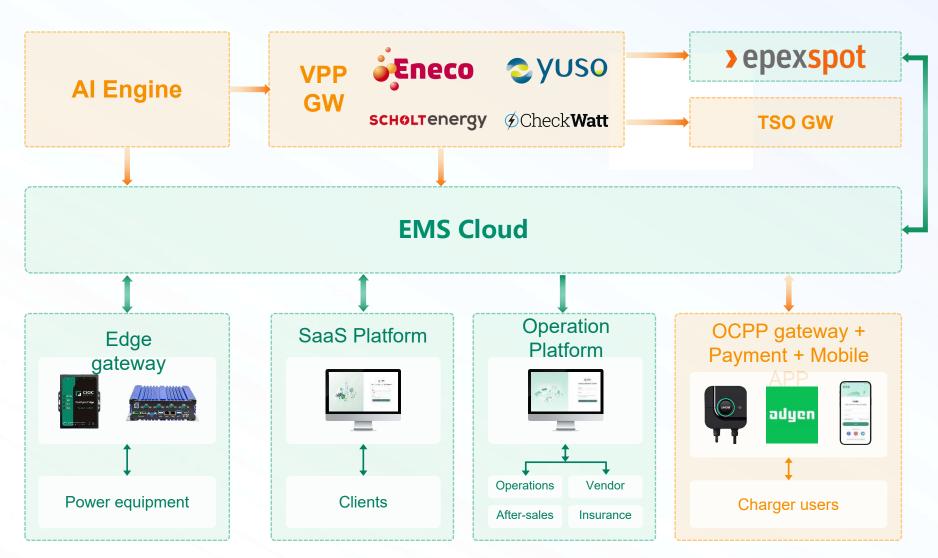
#### >>>Features

- •Pure sine wave solar inverter (on/off grid)
- •Output power factor 1.0
- •WIFI&GPRS available for IOS and Andriod
- •One key restoration to factory settings
- •Built-in Lithium battery automatic activation
- •Integrated design
- •Built-in anti-dust kit for harsh environment
- •Smart battery charge design to optimize battery life

EPES-VMO2			
	PV(DC Input)		
Recommended Max.PV Input Power	6000W		
Max.Input Voltage	500V		
MPPT Operating voltage range	85-450V(@75V startpu)		
Number of MPPT	1		
Max. Number of Input String/MPPT	1		
Max. Input Current/MMPT	27A		
Max Short-circuit current/MPPT	37A		
	Grid (AC Input)		
Max Output Power	6000W		
Max Output Current	50A		
Rated Grid voltage	220/230/240V(L.N.PE)		
Rated Grid frequency	50/60Hz		
Acceptable range	170~280Vac(for UPS) 90~280 Vac(for home application)		
	Battery Parameters		
Battery voltage range	40~60Vdc		
Battery capacity	10.24kWh		
Rated Battery Voltage	48Vdc.51.2Vdc		
Max charge/discharge current	120A/130A		
BMS Commucation Mode	Software version		
	General Parameters		
Peak efficiency	98%		
Max. MPPT efficiency	99.90%		
Operating temperature range	'-10°C~50°C		
Rated Humidity range	10%-95%		
Max operating altitude	>2000m derating		
Standby self-consumption	<10W		
Cooling mode	Fan cooling		
Dimension D*W*H	450*450*515(mm)		
Weight	118kg		



# **Energy Management System**



#### **Basic features:**

- EMS Cloud
- Edge gateway
- EMS SaaS Platform

#### Advanced features:

- EMS operation platform
- Al Strategy
- · VPP electricity trading
- Charging stations with accompanying paymentenabled apps

Unlock the full potential of our product with our advanced features.



## **Cloud Platform**



#### Product Overview

- •Cloud platform for calculating user benefits, maintainability, management, and data mining of massive battery information.
- •Analyzing battery system data to enhance the safety and stability of system operations.

#### Product Features

- •Advanced application algorithms, utilizing big data mining and visualization technologies to provide intelligent operation and maintenance for energy storage stations.
- •Customizable development with comprehensive simulation capabilities.

#### Product Functions

- •Data collection, visualization, integrated operation and maintenance management.
- •Remote operation strategy control, advanced application algorithms, user benefit statistics.
- •Multi-level access control, system information encryption to meet



# **THANKS**

